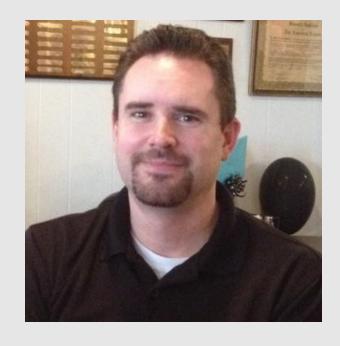


Speakers



Steve Hook, GISP
GIS Manager
Noble County Government



Brad Stump, GISP
GIS Specialist
Butler, Fairman & Seufert



Megan Compton, MPA
Geographic Information Officer
State of Indiana

IndianaMap 2.0 Survey



• The goals of the **IndianaMap 2.0** will be to host and distribute statewide GIS data layers, including imagery, and other data deemed necessary and important by the GIS community.

• This survey results will guide decisions for **IndianaMap 2.0**. Your input and suggestions will help the Indiana Geographic Information Office better understand the GIS community's needs for **IndianaMap 2.0** features and upcoming request for proposal (RFP) to support data hosting, tools and distribution.

Agenda



- Steve Hook
 - Survey respondents, current use and key features for future use
- Brad Stump
 - GIS Data and content, including updates and formats
- Megan Compton
 - GIS data standards and IndianaMap 2.0 tools

Survey Results Overview





CONDUCTED:

MARCH 31

THRU

APRIL 16, 2020



TOTAL RESPONDENTS 431



GOVERNMENT – 57 %

COMMERCIAL – 15 %

EDU./UNIVERSITY – 10 %

NON-PROFIT – 5 %

UTILITY – 3 %

OTHER – 8 %



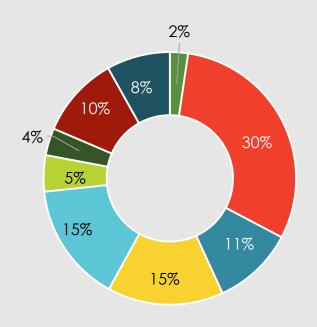
UNDERSTAND GIS
COMMUNITY'S
NEEDS

FOR

REQUEST FOR PROPOSAL (RFP)

Sector Detail





- Federal Government
- City/Town
- Commercial
- Utility
- Other please specify -

- State Government
- County Government
- Non-profit
- Educational/University

Other Category

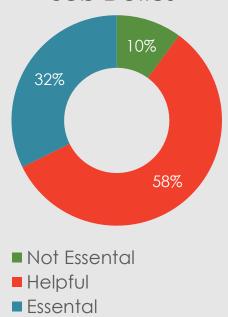
Private	6
Retired	4
MPO	8
Regional	4
Library	2
Fire	1
Other (Various)	10

Answered: 431 Skipped: 0

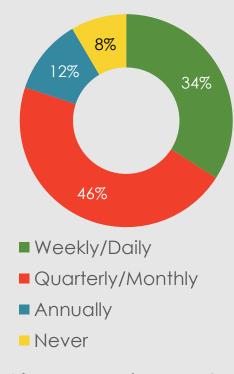
Importance - Frequency - Use



Importance of IndianaMap Data to Job Duties

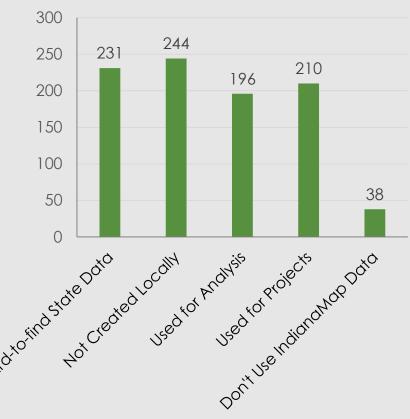


90 % - Helpful/Essential 10 % - Not Essential Frequency of IndianaMap Access



92 % - Accessing Data 8 % - Not Accessing

Why Use IndianaMap Data



91 % of 428 use IndianaMap

I don't use the IndianaMap - Why?



Functionality Limitations

- Not suited for my data needs
- Difficult to navigate
- Data only available for entire state
- Data is usually out of date local data is better

Non-essential Needs

- Supplier of data and not consumer of it
- Use our own GIS System

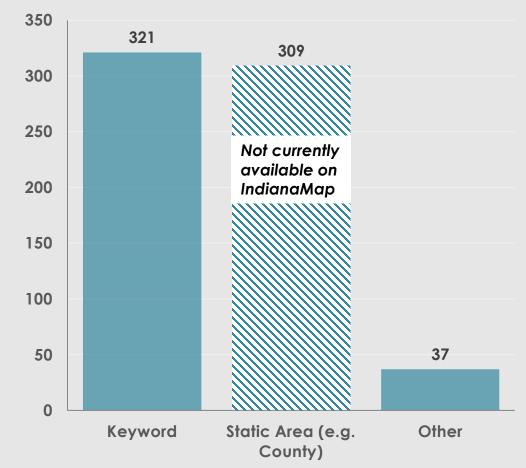
Education Outreach

- Didn't think it had relevant data to our work
- I simply haven't found the need for it yet. I do check it out from time to time just for curiosity's sake though.

GIS Data Searches in the Map Layer Gallery





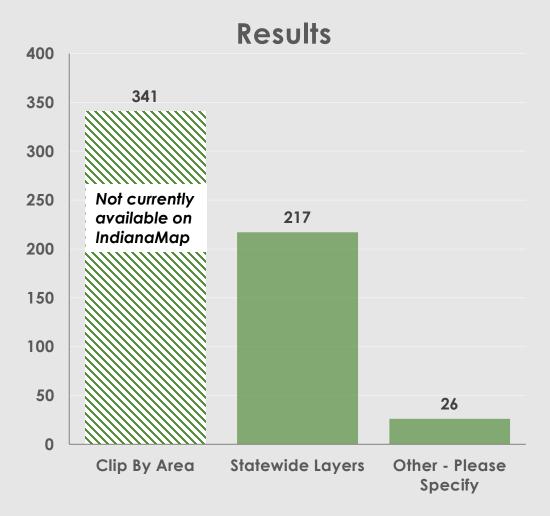


- By data category (Address, Waterbodies, Zip Code, etc.)
- By features (connected waterbodies, PLSS, etc.)
- By feature content (attributes)
- Keywords (Topics and Tags)
- Lists of all layers in a keyword category
- Current IndianaMap Search Options
- By date (Year, etc.)
- By Polygon Drawn on map (Show Available datasets)
- By Geographic Area of Interest (Quad, Municipal Boundary, Unincorporated Area, Area Smaller than a County)
- Similar to the Indiana Spatial Data Portal
- Well organized thematic datasets presented so I can download by clicking on a link

Answered: 406 Skipped: 25

Within the Map Viewer, how would you like to select data for download?





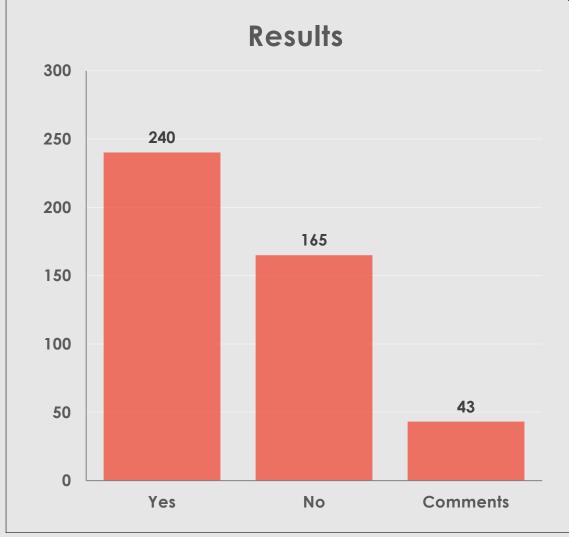
Comments

- County/County Layers/County Boundaries
- County Data Sets for Parcels, Roads, Addresses, Orthoimagery
- Townships, Watershed, other administrative districts.
- Data that is within county and MPO boundaries would be very useful
- Draw a border, or select a municipality, county, census block etc.
- Select by Address
- Select by Attribute
- Zip Codes

Answered: 426 Skipped: 5

Map Viewer to Preview and/or Build Custom Maps?

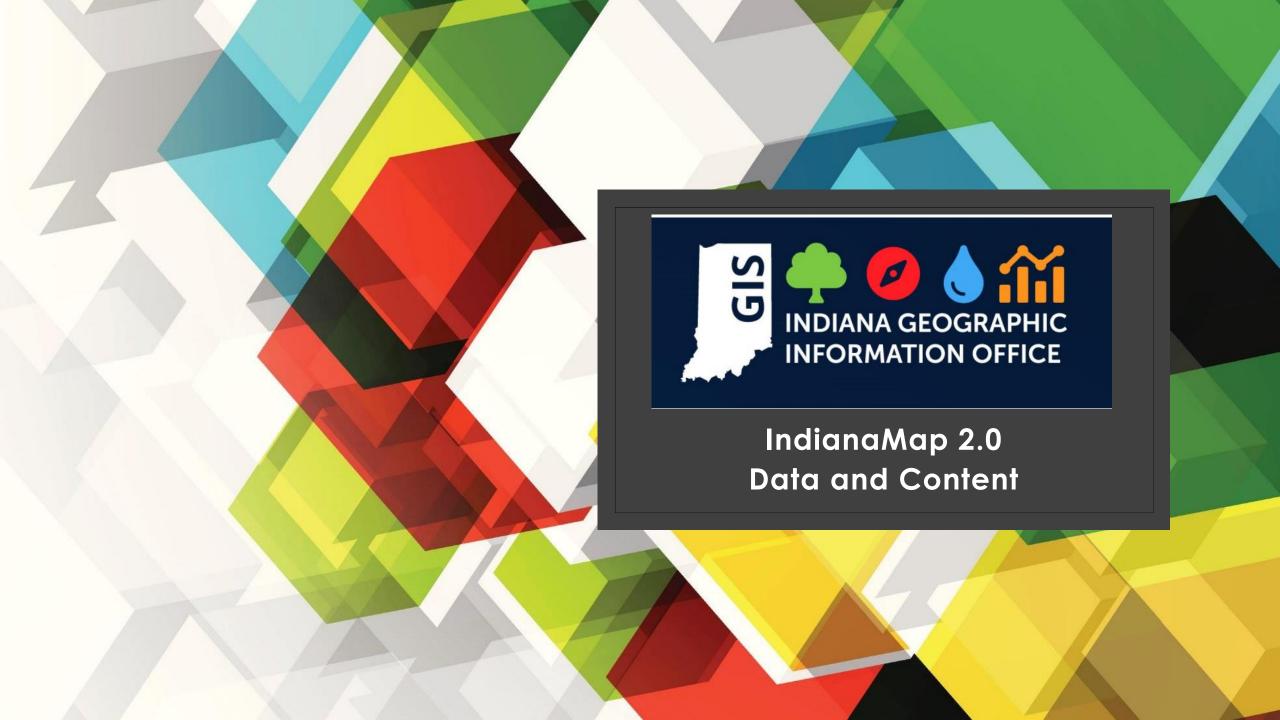




Comments

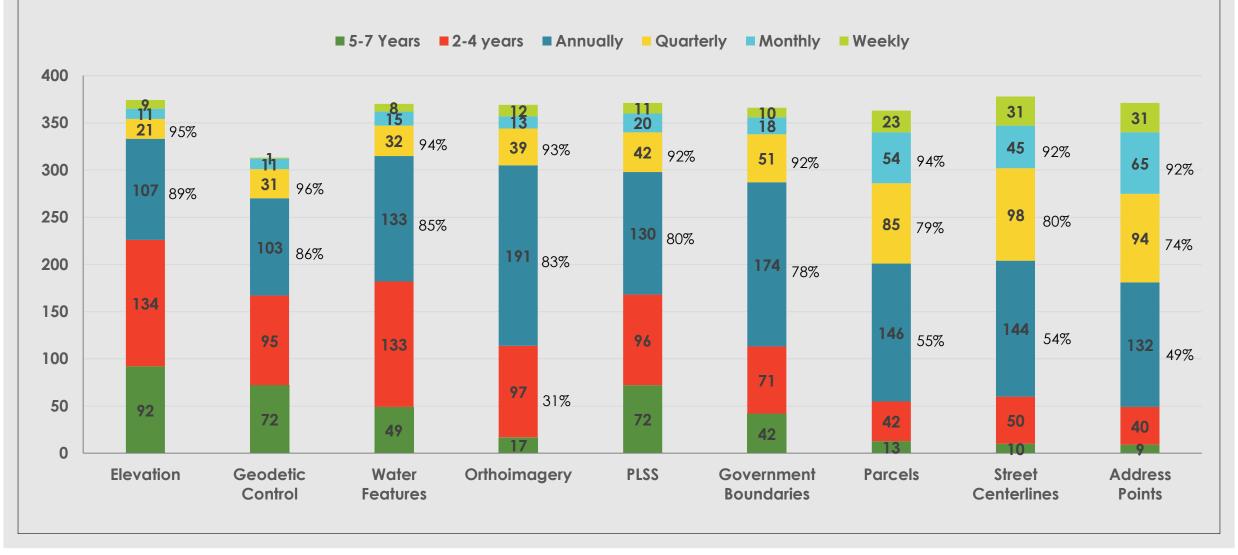
- Direct others to IndianaMap
- For larger projects
- Preview data before downloading
- Prefer to user own GIS software
- Would use if custom map environment worked well
- Use for quick visualizations
- Provide answers for special requests
- Use by those that don't have GIS software or don't have access to it.

Answered: 416 Skipped: 15



Desired Data Harvest & Posting Frequency





Requested Non-Framework Data Sets

Transportation:

- Rights-of-Way,
- Bridges,
- Edge of Pavement,
- Hwy Project Locations,
- Accident Data.
- •Sign Inventories,
- Railroads & Crossings,
- Airports & Controlled Airspace,
- Trails,
- Pedestrian/Bicycle
- •Infrastructure

Environmental:

- Well Locations,
- Aquifers,
- •Geological Data,
- •Soil Types,
- Red Flag Survey Data,
- USTs, LUSTs,
- Costal Zones,
- Endangered Species Locations,

Environmental (con't)

- •CAFOs,
- •Impaired Waterways/Waterbodies,
- Fertilizer/Pesticide Data,
- Crop Harvest Data,
- Classified Forests,
- Vegetative/Tree Cover,
- Color-Infrared Imagery (multiple times per growing season)

Hydrology:

- FIRM Floodplains,
- Wetland Inventory,
- Watersheds/HUC Boundaries,
- County Drains

Utilities:

- Service Territories,
- Utility locations,
- Cell Towers.
- Hydrant Locations

Reference:

- Building Outlines,
- Historic Register/DHPA Sites,
- State-Owned Properties,
- Land Use,
- Cemeteries

Administrative:

- USACE Regional Boundaries,
- Local Zoning,
- Voting Results,
- Elected Official Info w/ Boundaries,
- Census Blocks,
- TIF Districts

Critical Infrastructure:

- Schools,
- Hospitals,
- Gov't Buildings,
- Low- and High-Head Dams

Health:

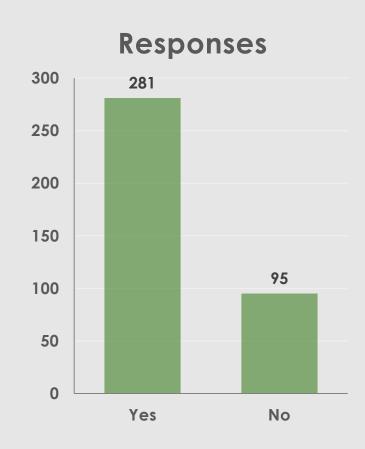
- Aggregated Health Data,
- Opiod Data (continue it)

Comments:

 When authoritative sources provide this data the IndianaMap should provide links to the source, not recreate

Historic Data Availability





Answered: 375 Skipped: 56

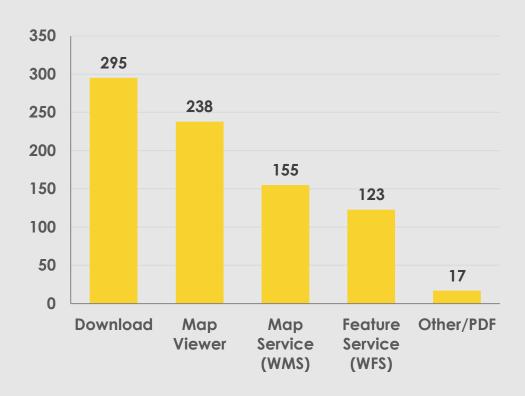
- Aerial Photography/Imagery
- Parcel Data
- Ground Elevations
- AADT
- Aerial photography and data sets that don't have a date column.
- Topographic maps
- Demographic maps
- Land cover change
- Political boundaries
- Fire insurance maps
- USGS maps, county atlases
- Townships

- Buildings
- Population
- DLGF
- Survey
- Waterways, wetlands
- government boundaries
- agricultural census data,
- SHAARD from IN DNR
- Sandborn imagery
- All Census or at least a link to that data
- All data that has ever been on IndianaMAP

Consuming the Data



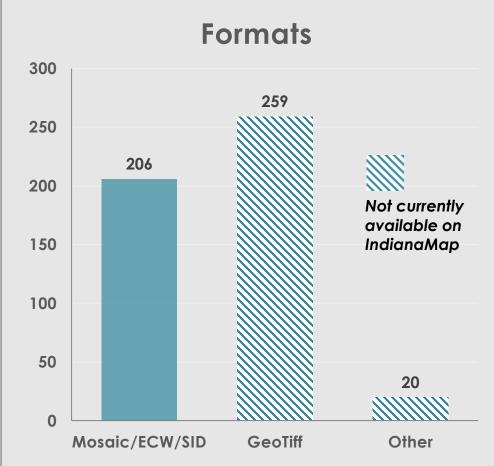
Preferences



- Download would allow a copy of the data to be downloaded to a PC and used by local software
- Map Viewer is expected to allow users to add layers and print custom maps from the browser, similar to the existing capability
- WMS & WFS both allow the data to be used as a service in a user's software app but:
 - WMS uses fixed symbology but allows service to be cached for faster rendering
 - WFS allows symbology to be set by user and, if allowed, feature editing (not in IndianaMap)

Desired Raster Data File Formats





Comments

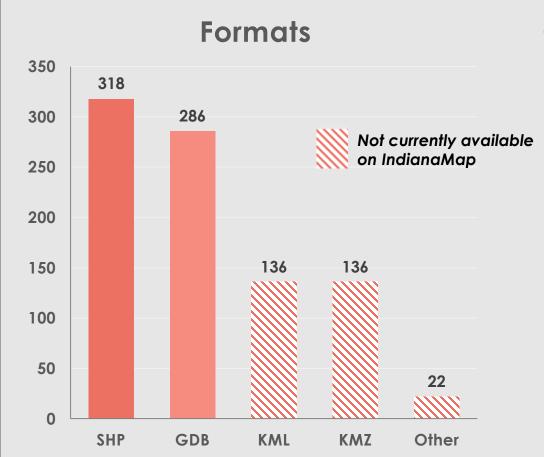
- Would like the ability to export/consume as:
 - PDF
 - BITMAP
 - WMS
 - ArcGIS Server Service
- Note that current system of Compressed Mosaics and GeoTiffs works well so requested IndianaMap keeps both

*2016 and prior GeoTIFFs available at ISDP

Answered: 341 Skipped: 89

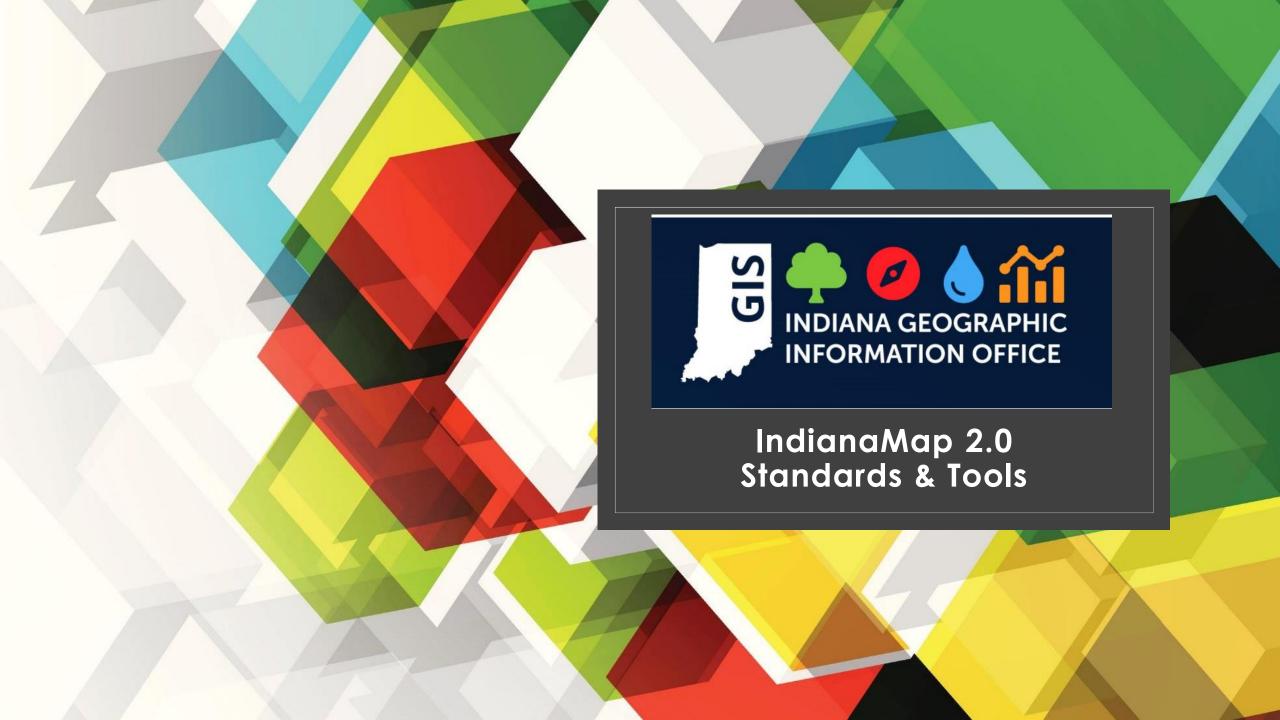
Desired Vector Data Formats





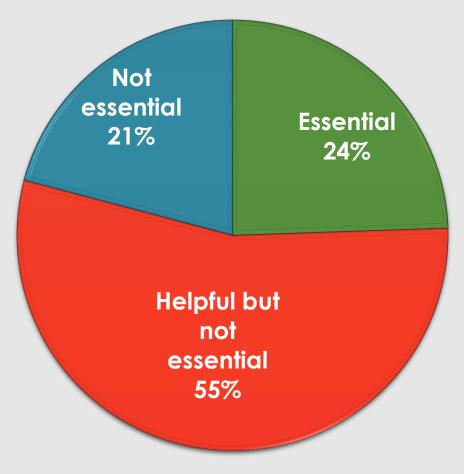
Answered: 396 Skipped: 36

- Would like the ability to export/consume as:
 - PDF
 - DXF/DWG
 - SQLite
 - LAS/LAZ
 - OGC Geopackage
 - WFS/WMS
- Geodatabase (GDB) export may have version issues
- One request was to eliminate downloads and use WFS/WMS so everyone's data is always the same version and always the most current



How important is FGDC compliant metadata to your use of the IndianaMap

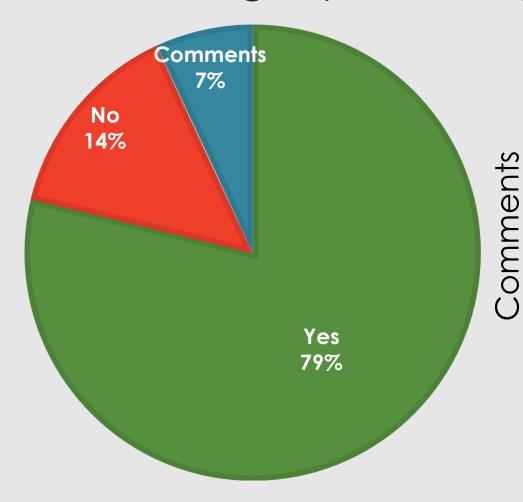
data layers?



Answered: 417 Skipped: 14

Should the Map Viewer include basic geoprocessing tools?





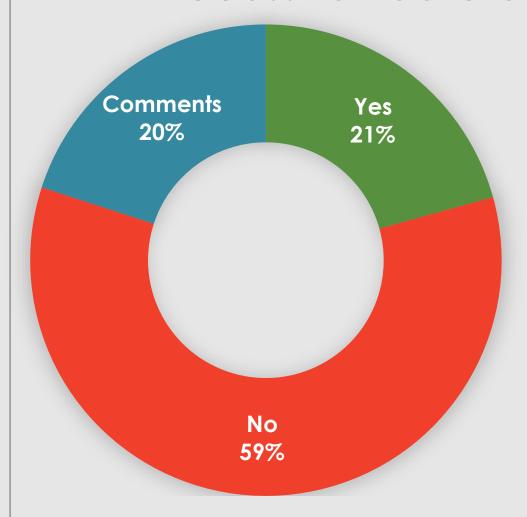
 Be able to select specific metadata rather than download the entire file then filter through in arc GIS

- Data analysis tools helpful to those who don't have access GIS tools
- Embedding data in some AGOL instance?
- Select data by window, or even a defined grid and download those data sets.
- If I could get a quick answer to something---something like Polis Center's
- Dependent on functionality
- Download data and use my own GIS
- Multiple feature selection, buffer, selection by location, select by attribute (query), importing shapefiles... etc...
- Selection and ID primarily
- The commercial and open source applications can do this just fine
- Useful for performing analysis over large areas

Answered: 400 Skipped: 31

Would be Willing to Pay for Advanced Access to Features and Datasets





- Dependent on method of cost calculation, depends on funding and what features and data sets will be available.
- Government agencies should be provided free access
- I use it for teaching and research. Payment cripples both activities for small institutions.
- as long as it is useful data
- Aren't taxpayers already paying for this to begin with?
- One year flat fee subscription of \$250 or less could easily be justified. Anything over needs County Council's involvement & that discourages use.
- Can be hard to get county government to pay for such things
- It would depend on how much, what is an advanced access feature, and if there is another available source for free
- Possibly at an organizational level, but I feel strongly that this data should be made freely available to the public

Answered: 392 Skipped: 39

Suggestions for new capabilities, features or datasets for IndianaMap 2.0?



- Do a comparison with other states that provide similar service to see how we fare and what we might be to improve?
- Ability to only download data within layers (i.e. downloading a town's corporate boundary out of the boundaries layer)
- o clip, zip and ship
- Having API functionality should help to future proof IndianaMap and keep it relevant regardless of other technological advances elsewhere.
- I love IndianaMap! Keep up the good work! You're providing an amazing public service
- Easier more intuitive interface

- Easy navigation dashboard for GIS professionals, and non-professionals.
- Easy selection feature for downloading LiDAR data.
- An area to send in suggestions for future of data
- Building footprints with attribution
- Ability to perform basic buffering and selection of map features and create custom maps and download selected features.
- a tool for error notification which would allow anyone finding an error to provide notice to the source of the data.
- I would like to download our county and not everybody's. I would like to see an easier way to navigate to the data.

- Regular updates, IndianaMap is a wonderful resource!
- Potentially remote sensing data like Landsat.
- Along with this funding mechanism, requirements need to be placed upon agencies, municipalities, and quasigovernmental organizations to require participation, regular maintenance, and standards.
- I would like to see more tutorials for beginner/intermediate end users.
- I think it would also be really need to have a crowdsourcing function for local community assets.
- Easier to search through layers

